

# 3D Blaster Annihilator 2 MX Installation Guide

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## Introduction

The 3D Blaster™ Annihilator 2 MX is a quality 2D/3D/video accelerator that uses the latest NVIDIA™ GeForce2 MX™ chipset. GeForce2 MX is an advanced 256-bit 3D processor, combining 2<sup>nd</sup> Generation Transform and Lighting (T&L) technology with the NVIDIA Shading Rasterizer (NSR) to produce stunning visual quality and performance.

3D Blaster Annihilator 2 MX gives developers the freedom to create special effects such as Multi-Texture Bump Mapping to simulate rough surfaces and Cube Environment Mapping to give objects reflective properties. Developers can also combine texture-filtering modes with hardware anti-aliasing to create realistic images that rival more expensive graphics workstations.

3D Blaster Annihilator 2 MX also provides outstanding 2D and video acceleration, supporting motion compensation for MPEG-2 decoding and programmable gamma tables that optimize image quality.

## Serial and Model Numbers

Your card's serial and model numbers can be found at the back of the card. Record the serial and model numbers below. This information will be useful if you need to contact our technical support staff for troubleshooting or your dealer for warranty service.

Hardware	Product Codes	Numbers
3D Blaster Annihilator 2 MX	Serial Number	
	Model Number	

## Before You Begin

The README file on the CD-ROM contains information not available at the time of printing. Read this file before you continue.

## Minimum System Requirements

- IBM® PC 100% compatible
- Intel® Pentium® II or AMD™ K6® class processors at 266 MHz or higher
- 64 MB RAM or more
- 15 MB of available hard disk space (for driver installation)\*
- AGP 2.0 compliant slot (AGP version)
- PCI 2.1 compliant slot (PCI version)
- CD-ROM drive
- Windows 95, Windows 98, Windows Me, Windows NT 4.0 (with Service Pack 5) or Windows 2000
- Standard VGA monitor or multi-frequency VGA monitor

\*Note: Additional hard disk space will be required for the full software package to be loaded to your hard drive.

## Updating Drivers

To download the latest drivers for 3D Blaster Annihilator 2 MX, visit Creative's Web site at **[www.creativehelp.com](http://www.creativehelp.com)**.

## Preliminary step for Windows 95 users

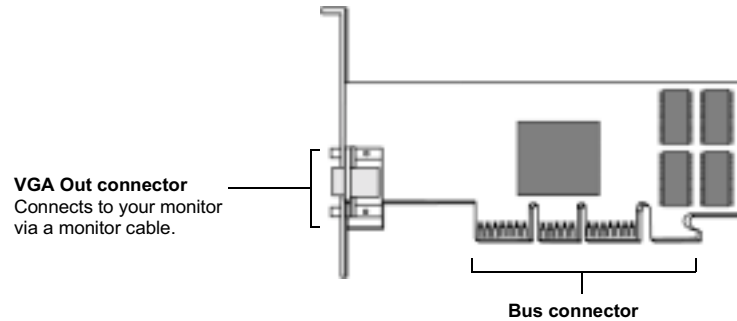
Since Windows automatically detects new hardware and starts the software installation procedure upon startup, you should verify your Windows 95 version number before installing the graphics card.

*To verify your Windows 95 version number*

1. Click Start, select Settings, click on Control Panel.
2. In the Control Panel window, double-click the System icon.  
The General tabbed page of the System Properties dialog box will display your Windows 95 version number.
3. Note the possible Windows 95 version numbers below. For future reference you may want to select the check box of your version after completing step 2.
  - 4.00.950 (Retail version)
  - 4.00.950A (Retail version)
  - 4.00.950B (OSR version 2 and 2.1)
  - 4.00.950C (OSR version 2.5)

# Installing Your Graphics Card

This section shows you the connectors on the 3D Blaster Annihilator 2 MX card.

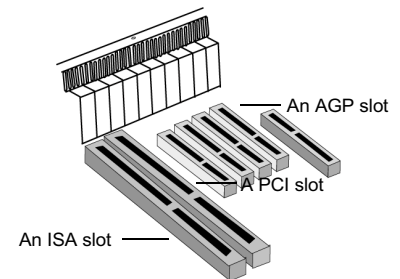


## To install the graphics card

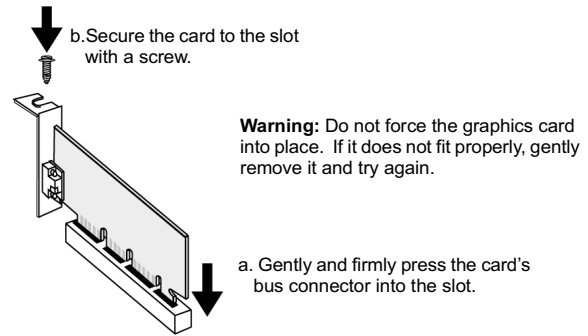


If you are replacing an existing graphics card with the 3D Blaster Annihilator 2 MX, please remember to remove the existing graphics card.

1. Turn off your computer and all peripheral devices.
2. Disconnect the power cord from the wall outlet.
3. Touch any metallic surface on your computer to discharge any static electricity.
4. Remove the computer cover.
5. AGP version: Locate the AGP bus slot.  
PCI version: Locate a free PCI expansion slot.  
The figure to the right shows the various types of expansion slots.
6. Remove the metal plate from the selected (PCI or AGP) slot. Keep the screw and metal plate for future use.
7. Align the bus connector of the graphics card with the appropriate slot.



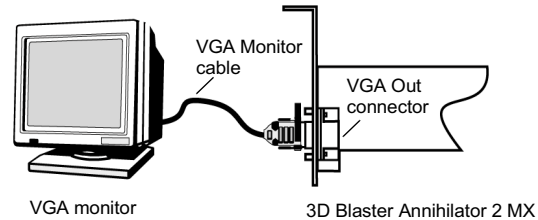
- Press the card's bus connector gently but firmly into the slot, making sure that it comes into full contact with the slot. Then, secure the card to the computer casing with a screw. See the figure below.



- Connect the monitor cable to the VGA Out connector of the graphics card, as shown in the figure below.



Your VGA cable should have a 15-pin DIN type connector. If your multi-frequency monitor allows you to switch between 'TTL' and 'analog' operation modes, set the switch to 'analog'. For details, refer to your



- Replace the computer cover and plug the power cord into the wall outlet.

## Installing Software

After installing the graphics card, you can install the software.

The 3D Blaster Annihilator 2 MX CD contains the following:

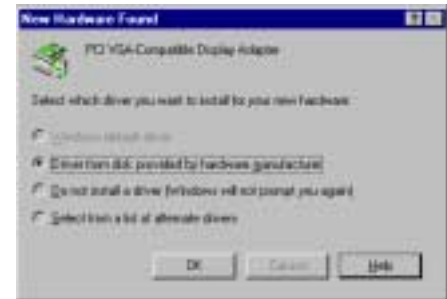
- Drivers for Windows 95, Windows 98 and Windows Me (common to all three)
- Drivers for Windows NT 4.0 and Windows 2000
- Creative Enhanced BlasterControl™ for Windows 95, Windows 98, Windows Me, Windows NT 4.0 and Windows 2000
- Creative Lava!™ Player
- MediaRing Talk™
- GeForce2 Experience Demos

This section shows you how to install software:

- Windows 95 (Retail version)
- Windows 95 (OSR version 2.0 and later)
- Windows 98
- Windows Me
- Windows NT 4.0 (Service Pack 5)
- Windows 2000

### Windows 95 (Retail version)

1. Turn on your system.  
Windows 95 automatically detects the graphics card. A **New Hardware Found** dialog box appears, informing you that a display adapter has been detected.
2. When a dialog box similar to the figure opposite appears, click **Driver from disk provided by hardware manufacturer**, and then click the **OK** button.
3. Insert the 3D Blaster Annihilator 2 MX CD into your CD-ROM drive.
4. In the **Install From Disk** dialog box, type **D:\GRAPHICS\ENGLISH\WIN9XDRV** (where D: represents your CD-ROM drive), and then click the **OK** button.
5. If prompted to select drivers, click the **Creative GB0030** drivers (AGP version) or **Creative GB0050** drivers (PCI version).  
The drivers are copied to your system.
6. When prompted to restart your system, click the **Yes** button.



Windows 95  
(OSR version 2.0  
and later)

7. After the system has restarted, proceed to install the applications. Click **Start** then click **Run**.
8. In the **Run** dialog box, type **D:\GRAPHICS\ENGLISH\SETUP.EXE** and click the **OK** button.
9. Follow the instructions on the screen to complete the setup.  
If you do not install all the applications now, you can install them later.

1. Turn on your system.  
Windows 95 automatically detects the graphics card.  
A **New Hardware Found** dialog box appears, informing you that a display adapter has been detected.
2. When a dialog box similar to the figure 6 opposite appears, click the **Next** button.
3. In the **Update Device Driver Wizard** dialog box, click the **Other Locations** button .
4. Insert the 3D Blaster Annihilator 2 MX CD into your CD-ROM drive.
5. In the **Select Other Location** dialog box, type **D:\GRAPHICS\ENGLISH\WIN9XDRV** (where D: represents your CD-ROM drive), and then click the **OK** button.
6. In the **Update Device Driver Wizard** dialog box, click the **Finish** button.
7. In the **Insert Disk** dialog box, click the **OK** button.
8. In the **Copying Files** dialog box, type **D:\GRAPHICS\ENGLISH\WIN9XDRV**, and then click the **OK** button.  
The drivers are copied to your system.
9. In the **Update Device Driver Wizard** dialog box, click the **OK** button.
10. When prompted to restart your system, click the **Yes** button.
11. After the system has restarted, proceed to install the applications. Click **Start**, then click **Run**.
12. In the **Run** dialog box, type **D:\GRAPHICS\ENGLISH\SETUP.EXE** and click the **OK** button.
13. Follow the instructions on the screen to complete the setup.  
If you do not install all the applications now, you can install them later.



## Windows 98

1. Turn on your system.  
Windows 98 automatically detects the graphics card. An **Add New Hardware Wizard** dialog box appears, informing you that a display adapter has been detected.
2. When a dialog box similar to the figure opposite appears, click **Display a list of all the drivers in a specific location, so you can select the driver you want**, and then click the **Next** button.
3. Insert the 3D Blaster Annihilator 2 MX CD into your CD-ROM drive.
4. In the **Models** list box, click the **Have Disk** button.
5. In the **Install From Disk** dialog box, type **D:\GRAPHICS\ENGLISH\WIN9XDRV** (where D: represents your CD-ROM drive) and click the **OK** button.  
If you are installing 3D Blaster Annihilator 2 MX as a second or subsequent card to make use of Windows 98's multi-monitor capability, you will see an **Update Driver Warning** message telling you that the driver you selected may not work correctly. You *must* click the **Yes** button to confirm that you want to use the selected driver. Otherwise, the system will install the wrong driver and will not recognize the card as a 3D Blaster Annihilator 2 MX card (for details, see "Windows 98/Me Multi-Monitor Display Problems" on page 15).
6. In the **Models** list box of the **Select Device** dialog box, make sure the **Creative GB0030** (AGP version) or **Creative GB0050** (PCI version) entry is selected and click the **OK** button.
7. Click the **Next** button.
8. Click the **Finish** button.  
The drivers are copied to your system.
9. When prompted to restart your system, click the **Yes** button.
10. After the system has restarted, proceed to install the applications. Click **Start**, click **Run**.
11. In the **Run** dialog box, type **D:\GRAPHICS\ENGLISH\SETUP.EXE** and click the **OK** button.
12. Follow the instructions on the screen to complete the setup.  
If you do not install all the applications now, you can install them later.



## Windows Me

1. Turn on your system.
2. Windows Me automatically detects the graphics card.  
An **Add New Hardware Wizard** dialog box appears, informing you that a display adapter has been detected.
3. Windows will automatically install the drivers for a **Standard PCI Graphics Adapter (VGA) (Microsoft) (6-8-2000)**.  
If you are installing 3D Blaster Annihilator 2 MX as a second or subsequent card to make use of Windows Me's multi-monitor capability, you will see an **Update Driver Warning** message telling you that the driver selected may not work correctly. You *must* click the **Yes** button to confirm that you want to use the selected driver. Otherwise, the system will install the wrong driver and will not recognize the card as a 3D Blaster Annihilator 2 MX card (for details, see "Windows 98/Me Multi-Monitor Display Problems" on page 15).
4. Click the **Next** button.
5. Click the **Finish** button.
6. When prompted to restart your system, click the **Yes** button.
7. After the system has restarted, proceed to install the applications. Click **Start -> Run**.
8. Insert the 3D Blaster Annihilator 2 MX CD into your CD-ROM drive.
9. In the **Run** dialog box, type **D:\GRAPHICS\ENGLISH\SETUP.EXE** (where D: represents your CD-ROM drive) and click the **OK** button.
10. Follow the instructions on the screen to complete the setup.  
If you do not install all the applications now, you can install them later.

## Windows NT 4.0 (Service Pack 5)

1. Turn on your system.
2. Click **Start**, click **Run**.
3. In the **Run** dialog box, type **D:\GRAPHICS\ENGLISH\SETUP.EXE** (where D: represents your CD-ROM drive) and click the **OK** button.
4. Follow the instructions on the screen to complete the setup.  
If you do not install all the applications now, you can install them later.
5. If the **Invalid Display Settings** dialog box appears after your system has restarted, click the **OK** button and change the display settings.  
For details, see "To change the display settings in Windows NT 4.0 and Windows 2000" on page 10.



## Windows 2000

1. Turn on your computer. Windows 2000 automatically detects the graphics card. The “Found New Hardware Wizard” dialog box appears, informing you that a display adapter has been detected.
2. Select the “Search for a suitable driver” option and click the Next button.
3. Insert the 3D Blaster Annihilator 2 Ultra CD into your CD-ROM drive.
4. In the Optimal search locations list, check the CD-ROM drivers box and click the Next button.
5. The Driver file search results will identify the graphics card as **Creative GB0030** (AGP version) or **Creative GB0050** (PCI version) and locate the driver files in **D:\GRAPHICS\ENGLISH\WIN2KDRV** location (D: represents your CD-ROM drive). Click the Next button.
6. When the “Digital Signature not Found” dialog box appears, click the Yes button to continue the installation.
7. When the installation is complete, click the Finish button.
8. After the installation is complete, click Start on the Windows Taskbar and click Run.
9. In the Run dialog box, type **D:\GRAPHICS\ENGLISH\SETUP.EXE** and click on the Ok button.
10. Follow the instructions on the screen to complete the setup. If you do not install all the applications now, you can install them later.

## Changing Settings

To change the display settings in Windows NT 4.0 and Windows 2000

1. Right-click your desktop, and then click **Properties** on the shortcut menu.
2. In the **Display Properties** dialog box, click the **Settings** tab.
3. In the **Desktop Area** group box, drag the slider to set the desired resolution.
4. In the **Color Palette** group box, select the desired color. Certain colors may not be available for some display resolutions.
5. In the **Refresh Frequency** group box, select the desired refresh rate.
6. To test the settings, click the **Test** button, and then click the **OK** button.  
When the **Testing Mode** dialog box reappears:
  - If the test bitmap is properly displayed, click the **Yes** button.
  - If not, click the **No** button. A warning message will be displayed. Click the **OK** button and repeat steps 3 to 6, changing one or more of the settings.
7. Click the **OK** button to close the **Display Properties** dialog box.

To change the performance settings

You can customize the settings of your graphics card for optimal performance with applications, using the instructions below. However, if your monitor displays abnormal behavior, revert to the factory default settings (see “Troubleshooting” on page 15).

1. Click Start, select Programs, select Creative, select BlasterControl4, click on Display Center.
2. In Display Center, click the **Tweak** button to start BlasterControl Tweak Center.
3. Select the desired settings and click the **OK** button.

## Getting More Information

### 3D Blaster Annihilator 2 MX

The Help file for 3D Blaster Annihilator 2 MX gives a brief introduction to the features supported by this graphics card.

To open the Help file for 3D Blaster Annihilator 2 MX

Click Start, select Programs, select Creative, click on Help.


### Creative BlasterControl

The Help file for Creative BlasterControl shows you how to use the BlasterControl utility to customize your screen resolution, color depth, and refresh rate in Windows.

To open the Help file for BlasterControl

Click Start, select Programs, select Creative, select BlasterControl4, click on Help.

To open Help topics specific to a BlasterControl module

In the BlasterControl module, click the Show Help Window  button.

### LAVA! Player

The Help file for LAVA! Player shows you how to use the multimedia player.

To open the Help file for LAVA! Player

Click Start, select Programs, select Creative, select Creative LAVA!, click on LAVA! Help.

# Technical Specifications

## Architecture Highlights

- Powered by the NVIDIA GeForce 2 MX™
- Advanced 256-bit graphics architecture
- 32MB of Double Data Rate (DDR) memory
- Intergrated high speed 350MHz RAMDAC
- 256-bit graphics architecture
- AGP 4X, with Fast Writes support (AGP version - requires motherboard support)

## 3D Features

- Two independent pixel pipelines
- Up to 4 texture-mapped, filtered, lit texels per clock cycle.
- NVIDIA Shading Rasterizer per-pixel rendering engine
- Delivers fill rates of up to 700 megatexels per second
- 2nd-generation transform and lighting (T&L) engines
- Processes over 20 million sustained triangles per second
- Optimized Direct3D® and OpenGL® acceleration
- Hardware Full Scene Anti-Aliasing (FSAA)
- Advanced per-pixel, perspective-correct texturing
  - Shading and lighting
  - Cube environment mapping
  - Projective textures
  - Bump mapping
  - Texture modulation
  - Light and reflection maps
  - Procedural textures
- Fog and Depth Cueing
  - Radial or linear
  - Per-vertex or per-pixel

## 2D Features

- High performance 2D, GUI, DirectDraw®
- Screen resolutions up to 2048 x 1536
- Optimized for 32, 16 and 8-bit per pixel color depths
- Flicker-free refresh rates up to 240Hz

## Video Features

- Video acceleration for DirectShow®, MPEG1, MPEG2
- Enhanced motion compensation for full screen, full motion video playback
- Multi-tap bilinear video scaling and filtering
- Multiple video windows with hardware color space conversion
- DVD sub-picture alpha blended compositing

## Drivers

- Windows NT 4.0 and Windows 2000 display drivers
- Windows 95, Windows 98 and Windows Me display driver supporting DirectDraw, Direct3D, DirectVideo, and ActiveX
- OpenGL ICD for Windows 95 and Windows 98, Windows NT 4.0, Windows 2000.

## Utilities

- Creative BlasterControl 4.20
- MediaRing Talk
- Creative Lava! Player
- Online registration

## Refresh Rates



The refresh rates shown in the table are the highest obtainable and are monitor-dependent. Resolutions, pixel depths, and refresh rates are also driver-dependent and may not be available for some applications or operating systems.

The refresh rates show in the table below are supported by different video modes (based on 350 MHz RAMDAC).

Refresh Rates	Color Depth		
	Resolution	256 (8-bit)	64k (16-bit)
<b>640x480</b>	60, 70, 72, 75, 85, 100, 120, 140, 144, 150, 170, 200, 240	60, 70, 72, 75, 85, 100, 120, 140, 144, 150, 170, 200, 240	60, 70, 72, 75, 85, 100, 120, 140, 144, 150, 170, 200, 240
<b>800x600</b>	60, 70, 72, 75, 85, 100, 120, 140, 144, 170, 200, 240	60, 70, 72, 75, 85, 100, 120, 140, 144, 170, 200, 240	60, 70, 72, 75, 85, 100, 120, 140, 144, 150, 170, 200, 240
<b>1024x768</b>	60, 70, 72, 75, 85, 100, 120, 140, 144, 150, 170, 200, 240	60, 70, 72, 75, 85, 100, 120, 140, 144, 150, 170, 200, 240	60, 70, 72, 75, 85, 100, 120, 140, 144, 150, 170, 200
<b>1152x864</b>	60, 70, 72, 75, 85, 100, 120, 140, 144, 150, 170, 200	60, 70, 72, 75, 85, 100, 120, 140, 144, 150, 170, 200	60, 70, 72, 75, 85, 100, 120, 140, 150, 170
<b>1280x720</b>	60, 70, 72, 75, 85, 100, 120, 140, 144, 150, 170	60, 70, 72, 75, 85, 100, 120, 140, 144, 150, 170	60, 70, 72, 75, 85, 100, 120, 140, 150
<b>1280x960</b>	60, 70, 72, 75, 85, 100, 120, 140, 144, 150, 170	60, 70, 72, 75, 85, 100, 120, 140, 144, 150, 170	60, 70, 72, 75, 85, 100, 120, 140, 150
<b>1280x1024</b>	60, 70, 72, 75, 85, 100, 120, 140, 144, 150, 170	60, 70, 72, 75, 85, 100, 120, 140, 144, 150, 170	60, 70, 72, 75, 85, 100, 120, 140, 150
<b>1600x900</b>	60, 70, 72, 75, 85, 100, 120, 140, 144, 150	60, 70, 72, 75, 85, 100, 120, 140, 144, 150	60, 70, 72, 75, 85, 100, 120
<b>1600x1200</b>	60, 70, 72, 75, 85, 100, 120	60, 70, 72, 75, 85, 100, 120	60, 70, 72, 75, 85, 100
<b>1920x1080</b>	60, 70, 72, 75, 85, 100	60, 70, 72, 75, 85, 100	60, 70, 72, 75, 85
<b>1920x1200</b>	60, 70, 72, 75, 85, 100	60, 70, 72, 75, 85, 100	60, 70, 72, 75, 85
<b>1920x1440</b>	60, 70, 72, 75, 85	60, 70, 72, 75, 85	60, 70, 75
<b>2048x1536</b>	60, 70, 72, 75	60, 70, 72, 75	60

## Troubleshooting

### System Stops Responding, Blank Screen or Corrupted Display

*After installing 3D Blaster Annihilator 2 MX and starting your system, the monitor displays a blank screen.*

- Solutions** Try the following:
- Turn off your system and wait a while before turning it on again.
  - Verify that any built-in graphics card on your motherboard is disabled and that you have removed any other video display card from your system.
  - Be sure that your 3D Blaster Annihilator 2 MX card's bus connector is fully inserted into the expansion slot by pressing it firmly and evenly into the slot.
  - Verify that the pins of your monitor's VGA Input connector are not bent and that the connector is properly connected to the VGA Out connector of 3D Blaster Annihilator 2 MX.

### Windows 98/Me Multi-Monitor Display Problems

*In a multi-monitor setting, the monitor connected to the 3D Blaster Annihilator 2 MX card remains blank even though the card and its drivers have been installed.*

**Cause** If 3D Blaster Annihilator 2 MX's drivers are not specified during the software installation, the system installs it as a standard graphics card that does *not* support Windows 98/Me's multi-monitor feature.

- Solution** Update the device drivers to 3D Blaster Annihilator 2 MX's drivers:
1. Right-click your desktop, and then click **Properties** on the shortcut menu.
  2. In the **Display Properties** dialog box, click the **Settings** tab.
  3. On the **Settings** tabbed page, click the **Advanced Properties** button.
  4. In the **Advanced Display Properties** dialog box, click the **Change** button.
  5. In the **Select Device** dialog box, click the **Have Disk** button.
  6. Insert the 3D Blaster Annihilator 2 MX CD into your CD-ROM drive.
  7. Follow steps 6 through 13 of the procedure in "Windows 98" on page 7 to complete the update.

You can also try setting 3D Blaster Annihilator 2 MX as the primary boot up adapter in the system BIOS.

## Other Display Problems



For the resolutions supported by your monitor, refer to its manual.

*The monitor display flickers or the screen goes blank after Windows starts.*

**Cause** Your monitor may not support the resolution or refresh rate that you have set.

**Solution** Use display settings supported by the monitor.  
To change the display settings:

1. Restart your system in Windows 98/Me **Safe Mode**. To do so:
  - a. Restart your system and when the message “Starting Windows 98/Me...” appears, press <F8>. A list of options such as **Safe Mode** and **Command Prompt Only Mode** appears.
  - b. Select **Safe Mode** and press <Enter>.
2. After your system has restarted, right-click the desktop and click **Properties**.
3. In the **Display Properties** dialog box, click the **Settings** tab.
4. Try the following:
  - Make sure that the correct monitor is selected.  
Click the **Change Display Type** or **Advanced Properties** button. Select the **Monitor** tab and change the setting if necessary.
  - Use a lower refresh rate or the adapter’s default.  
For details on this, refer to the topic “Using BlasterControl Display Center” in the BlasterControl Help file.
  - Lower your monitor’s resolution.  
To do so, adjust the color depth and desktop area on the **Settings** tabbed page.

*Monitor display exhibits pixel drop (that is, pixels, usually white in color, appear on the screen) or other abnormal behavior.*

**Cause** The settings that you have selected for your graphics card may be incompatible with one or more games or applications that you are running.

**Solution** Use the factory default settings:

1. Click **Start**, select **Programs**, select **Creative**, click on **BlasterControl Display Center**.
2. Click the **Tweak** button to start BlasterControl Tweak Center.
3. Click the **Defaults** button.



## Beeping Sounds During System Startup

*When the system is starting up, there is a series of prolonged beeps.*

**Cause** Your 3D Blaster Annihilator 2 MX card may not be firmly inserted into the expansion slot.

**Solution** Be sure that the AGP bus connector of the graphics card is fully inserted into the expansion slot by pressing the card firmly and evenly into the slot. You can also try removing the card and re-inserting it.

## Problems Installing Software

*In Windows 95 or Windows 98, the installation program for BlasterControl does not run automatically after you have inserted the installation CD into your drive.*

**Cause** The AutoPlay feature in your Windows 95 or Windows 98 system is not enabled.

**Solution** To install the software from the CD:

1. Double-click the **My Computer** icon on your Windows desktop.
2. In the **My Computer** window, double-click the **Creative 3D Blaster Annihilator 2 MX** icon.  
If the installation program does not run, double-click on **Graphics**, double-click on **English** and double-click the **Setup** icon.
3. Follow the instructions on the screen to complete the installation.

## Problems Using Software

*When you restart Windows, one of the following error messages appears:*

- “BlasterControl will only work on Creative graphics product drivers. Do you want BlasterControl to be loaded the next time you start Windows?”
- “BlasterControl will only work on Creative graphics product drivers.”

**Cause** 3D Blaster Annihilator 2 MX drivers, required by BlasterControl, may have been replaced by other drivers when you installed DirectX applications.

**Solution** Reinstall or revert to the 3D Blaster Annihilator 2 MX drivers.  
To revert to the drivers:

1. Right-click your desktop, and then click **Properties** on the shortcut menu.
2. In the **Display Properties** dialog box, click the **Settings** tab, and then click the **Change Display Type** button or the **Advanced Properties** button.
3. In the **Adapter Type** group box or on the **Adapter** tabbed page, click the **Change** button.
4. In the **Select Device** dialog box, click **Creative GB0030** (AGP version) or **Creative GB0050** (PCI version), and then click the **OK** button.

5. In the **Insert Disk** dialog box, click the **OK** button without inserting any CD.
6. If 3D Blaster Annihilator 2 MX drivers and later versions of DirectX drivers are already installed, click the **Skip File** button until the **Adapter Type** group box or the **Adapter** tabbed page appears.
7. Click the two **Close** buttons to close the **Display Properties** dialog box.
8. When prompted to restart your system, click the **Yes** button.  
After you have restarted your system, the newer DirectX drivers will work with the latest 3D Blaster Annihilator 2 MX drivers.

## Problem with OpenGL Applications

*When starting OpenGL Screen Saver or applications in Windows 98, the message "No local buffer memory available" appears.*

**Solution** Set a lower resolution and color depth:

1. Right-click your desktop, and then click **Properties** on the shortcut menu.
2. In the **Display Properties** dialog box, click the **Settings** tab.
3. In the **Screen Area** group box, drag the slider to **640x480**.
4. In the **Color Palette** list, click **16-bit color (high color)** for OpenGL applications to work properly.

*OpenGL applications run too slowly in Windows 98.*

**Cause** OpenGL applications do not support Windows 98's multi-monitor feature. Consequently, Windows 98 disables all hardware acceleration when the multi-monitor option is enabled.

**Solution** Disable the multi-monitor option:

1. Right-click your desktop, and then click **Properties** on the shortcut menu.
2. In the **Display Properties** dialog box, click the **Settings** tab.
3. Clear the **Extend my Windows desktop onto this monitor** check box.

## Problem with PCI Bridge (in Windows 95)

*After installing Annihilator 2 MX (AGP version) onto a Pentium II LX system or any other AGP system, the Resources tabbed page of the GeForce2 MX Properties dialog box in Windows 95 shows resource conflicts similar to the following:*

*Memory Range used FEDC0000 - FEDDFFFF used by PCI standard PCI-to-PCI bridge.*

*Memory Range used FD800000 - FDFFFFFF used by PCI standard PCI-to-PCI bridge.*

*Memory Range used FE000000 - FE7FFFFF used by PCI standard PCI-to-PCI bridge.*

**Cause** Windows 95 cannot identify properly the AGP card because there is a conflict between the AGP card and the “PCI standard PCI-to-PCI” bridge.

**Solution** No action required.  
A conflict between the AGP video controller and the “PCI standard PCI-to-PCI bridge” in the Windows 95 Device Manager does not affect the functionality of the AGP card within Windows 95. This problem is common to all AGP graphics cards and does not affect 3D Blaster Annihilator 2 MX’s functionality.  
It has been resolved in Windows 98.

## Problem with AGP Aperture Size



Changing settings in BIOS incorrectly can cause the system to stop functioning.



Some of the steps from step 3 onwards may not apply to your system BIOS. Refer to your system BIOS documentation for

*DirectDraw/Direct3D fails to use hardware acceleration (HAL).*

**Cause** The BIOS setting for the AGP Aperture size is less than 8 MB.

**Solution** Set the AGP Aperture size to 8 MB or more.  
Do the following:

1. Restart your system.
2. During the memory check, press <Delete>. The BIOS setup menu appears.
3. Select **Chipset Features Setup** and press <Enter>.
4. Set your **AGP Aperture Size (MB)** to **8 MB** or more.
5. Press <Esc> to return to the BIOS setup menu.
6. Select **Save & Exit Setup**, and then press <Enter>.
7. Press <Y> and then press <Enter>.

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## Version 2.4, June 2000

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### Notice for the USA

FCC Part 15: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, this notice is not a guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the distance between the equipment and receiver.

- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician.
- Caution

To comply with the limits for the Class B digital device, pursuant to Part 15 of the FCC Rules, this device must be installed in computer equipment certified to comply with the Class B limits.

All cables used to connect the computer and peripherals must be shielded and grounded. Operation with non-certified computers or non-shielded cables may result in interference to radio or television reception.

#### Modifications

Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the device.

### Notice for Canada

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### Compliance

This product conforms to the following Council Directive:  
Directive 89/336/EEC, 92/31/EEC (EMC), 73/23/EEC (LVD)

#### Declaration of Conformity

According to the FCC96 208 and ET95-19 documents,

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Address: ***1901 McCarthy Boulevard  
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Tel: (408) 428-6600***

declares under its sole responsibility that the product

Trade Name: ***Creative Labs***

Model Number: ***GB0030 (AGP version)  
GB0050 (PCI version)***

**has been tested according to the FCC / CISPR22/85 requirements for Class B devices and found compliant with the following standards:**

EMI/EMC: ANSI C63.4 1992, FCC Part 15 Subpart B

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1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesirable operation.

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***Compliance Manager  
Creative Labs, Inc.  
28 August, 2000***

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Version 1.0  
October 2000

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